

In the Specification

Please amend the paragraph starting on Page 1, line 13 as follows:

This is a continuation application of U.S. patent application serial number 09/750,595.
~~which This is a continuation in part of U.S. patent application serial number 09/470,559 filed on December 23, 1999; this application is also a continuation in part of U.S. patent application serial number (unknown) filed on November 17, 2000, which is a continuation in part of U.S. patent application serial number 09/540,241 filed on March 31, 2000.~~

Please amend the paragraph starting on Page 4, line 5 as follows:

Another proposed method involved the use of a polymeric carrier coated onto the surface of a stent, as disclosed in U.S. Patent No. 5,464,650 issued to Berg et al. Berg disclosed applying to a stent body a solution which included a specified solvent, a specified polymer dissolved in the solvent, and a therapeutic substance dispersed in the blend. The solvent was allowed to evaporate, leaving on the stent surface a coating of the polymer and the therapeutic substance impregnated in the polymer. Among the specified, suitable choices of polymers listed by Berg, empirical results were specifically provided for poly(caprolactone) and poly(L-lactic acid). The preferred choice of mutually compatible solvents included acetone or chloroform. As indicated in Berg, stents were immersed in the solution 12 to 15 times or sprayed 20 times. The evaporation of the solvent provided a white coating. A white coloration is generally indicative of a brittle coating. A brittle coating is an undesirable characteristic, since portions of the coating typically become detached during stent expansion. Detachment of the coating causes the ~~quality~~ quantity of the therapeutic substance to fall below a threshold level sufficient for the effective treatment of a patient.

Please amend the paragraph starting on Page 8, line 8 as follows:

Figures 2A-2E illustrate a coating in accordance with some of the embodiments of the present invention;

Please amend the paragraph on page 11 as follows:

Representative examples of high content of hydrogen bonding group polymers include polyethylene-co-polyvinyl alcohol, epoxy polymers based on the diglycidylether of bisphenol A with amine crosslinking agents, epoxy polymers cured by polyols and ~~lewis~~ Lewis acid catalysts, epoxy phenolics, epoxy-polysulfides, ethylene vinyl acetate, melamine formaldehydes, polyvinylalcohol-co-vinyl acetate polymers, resorcinol-formaldehydes, urea-formaldehydes, polyvinylbutyral, polyvinylacetate, alkyd polyester resins, acrylic acid modified ethylene vinyl acetate polymers, methacrylic acid modified ethylene vinyl acetate polymers, acrylic acid modified ethylene acrylate polymers, methacrylic acid modified ethylene acrylate polymers, anhydride modified ethylene acrylate ~~copolymers~~ copolymers, and anhydride modified ethylene vinyl acetate polymers.

Please amend the paragraph starting on Page 13, line 20 and continuing to Page 14 as follows:

The solvent should be mutually compatible with the polymer and should be capable of placing the polymer into solution at the concentration desired in the solution. Useful solvents should also be able to expand the chains of the polymer for maximum interaction with the surface of the device, such as a metallic surface of a stent. Examples of solvent can include, but are not limited to, dimethylsulfoxide (DMSO), chloroform, ~~acetone~~, water (buffered saline), xylene, acetone, methanol, ethanol, 1-propanol, tetrahydrofuran, 1-butanone, dimethylformamide,

dimethylacetamide, cyclohexanone, ethyl acetate, methylethylketone, propylene glycol monomethylether, isopropanol, N-methyl pyrrolidinone, toluene and mixtures thereof.

Please amend the paragraph starting on Page 20, line 11 as follows:

The solvent should be capable of placing the polymer into solution at the concentration desired in the solution. Examples of solvent can include, but are not limited to, DMSO, chloroform, ~~acetone~~, water (buffered saline), xylene, acetone, methanol, ethanol, 1-propanol, tetrahydrofuran, 1-butanone, dimethylformamide, dimethylacetamide, cyclohexanone, and N-methyl pyrrolidinone. With the use of low ethylene content, e.g., 29 mol%, ethylene vinyl alcohol copolymer, a suitable choice of solvent is iso-propylalcohol (IPA) admixed with water.

Please amend the paragraph starting on Page 35, line 14 as follows:

With the use of the thermoplastic polymers, such as ethylene vinyl alcohol copolymer, polycaprolactone, poly(lactide-co-glycolide), poly(hydroxybutyrate), etc., the deposited primer composition should be exposed to a heat treatment at a temperature range greater than about the glass transition temperature (T_g) and less than about the melting temperature (T_m) of the selected polymer. Unexpected results have been discovered with treatment of the composition under this temperature range, specifically strong adhesion or bonding of the coating to the metallic surface of a stent. The device should be exposed to the heat treatment for any suitable duration of time, which would allow for the formation of the primer coating on the surface of the device and allows for the evaporation of the solvent or combination of solvent and wetting fluid. It is understood that essentially all of the solvent and the wetting fluid will be removed from the composition but traces or residues can remain blended with the polymer.

Please amend the paragraph starting on Page 36, line 10 as follows:

*Exact temperature depends on the degree of hydrolysis which is also known as the amount of residual ~~aeetate~~ acetate

Please amend the paragraph starting on Page 36, line 13 and continuing to Page 37 as follows:

With the use of one of the aforementioned thermoset polymers, the use of initiators may be required. By way of example, epoxy systems consisting of diglycidyl ether of bisphenol A resins can be cured with amine curatives, thermoset polyurethane prepolymers can be cured with polyols, polyamines, or water (moisture), and acrylated urethane can be cured with UV light. Examples 27 and 28 provide illustrative descriptions. If baked, the temperature can be above the T_g of the selected polymer.

Please amend the paragraph starting on Page 39, line 20 and continuing to Page 40 as follows:

In yet another embodiment, as illustrated in Figure 2D, reservoir region 26 can include a first and second reservoir sections 26A and 26B, each containing a different active ingredient, e.g., actinomycin D and taxol, respectively. Accordingly, coating 24 can carry a combination of at least two different active ingredients for sustained delivery. First and second sections 26A and 26B can be deposited by, for example, masking the area of primer region 28 over second section 26B and applying a first composition containing a first active ingredient to form first section 26A. First section 26A can ~~them~~ then be masked and a second composition containing a second active ingredient can be applied to form second section 26B. This procedure can be followed to form any suitable number of regions containing a different active ingredient.

Please delete the paragraph starting on Page 67, line 20, and continuing to Page 68. The paragraph is duplicative to the paragraph at the end of the application.

~~While particular embodiments of the present invention have been shown and described, it will be obvious to those skilled in the art that changes and modifications can be made without departing from this invention in its broader aspects and, therefore, the appended claims are to encompass within their scope all such changes and modifications as fall within the true spirit and scope of this invention.~~

Please amend the paragraph starting on Page 69, line 15 as follows:

3. Recorded number of peel defects at stent rings 3, 5, and 7. Only the ~~OD~~ outer diameter (“OD”) was examined for peel defects.

Please amend the paragraph starting on Page 73, line 11 as follows:

Peel defects are defined as areas where the coating separated from the stent. The number of peel defects were counted on the stents’ OD/sidewall on rings 3, 5, and 7. The flow field was on the ~~ID~~ inner diameter (“ID”) of the stents’ surface. Some of the damage to the OD surface could have been aggravated by the Tecoflex tubing. The number of peel defects observed on groups C and F (EVAL primer) was clearly lower than the other two test groups, regardless of flow rate. The increased flow rate did not induce more peel defects.